Ecotox Report for Case # P-18-0100

General

[redacted]

Report Status: Complete

Status Date: 10/04/2018

CRSS Date:

SAT Date:

SAT Chair: Awaiting Health Entry

Consolidated PMN: N

Consolidated Set:

Ecotox Related Cases: [redacted]

Health Related Cases: [redacted]

Submitter: Allnex USA Inc.

CAS Number: [redacted]

Chemical Name: [redacted]

Use: [redacted]

Trade Name: IRR 929

PV-max(kg/yr): [redacted]

Ecotox Assessor: Jewett, Freeborn

Fate Summary Statement

Fate Summary Statement: P-18-0100

FATE: [redacted]
Solid

S = Disp.
VP < 1.0E-6 torr at 25 °C (E)
BP > 400 °C (E)

H < 1.00E-8 (E)
POTW removal (%) = 90 via sorption
Time
for complete ultimate aerobic biodeg > mo

Sorption to
soils/sediments = v.strong
PBT Potential: P3B1
*CEB FATE:
Migration to ground water = negl

Physical Chemical Information

Molecular Weight:	[redacted]		
Wt% < 500:	[redacted]	**Wt% < 1000:**	[redacted]
Physical State - Neat:	Solid (est.)		
Melting Point:		**Melting Point (est):**	
MP (EPI):			
Vapor Pressure:		**Vapor Pressure (est):**	<0.000001
VP (EPI):			
Water Solubility:		**Water Solubility (est):**	Dispersible
Water Solubility (EPI):			
Henry's Law::			
Log Koc:		**Log Koc (EPI):**	
Log Kow:		**Log Kow (EPI):**	
Log Kow Comment:			

SAT Concern Level

Ecotox Rating (1):	1
Ecotox Rating Comment (1):	
Ecotox Rating (2):	
Ecotox Rating Comment (2):	
Ecotox Route of Exposure:	No releases to water

Ecotox Comments

Exposure Based Review (Eco):	N
Ecotox Comments:	
Exposure Based Testing:	

PBT Ratings

Persistence	Bioaccumulation	Toxicity	Comments
3	1	Awaiting Human Health Entry Awaiting Human Health Entry Awaiting Human Health Entry Awaiting Human Health Entry Awaiting Human Health Entry	

Eco-Toxicity Comment:

Fate Ratings

Removal in WWT/POTW (Overall): 90

Condition	Rating Values	Rating Description 1	2	3	4	Comment
Fish BCF:						
Log Fish BCF:						
WWT/POTW Sorption:	3	Low	Moderate	Strong	V. Strong	
WWT/POTW Stripping:	4	Extensive	Moderate	Low	Negligible	
Biodegradation Removal:	4	Unknown	High	Moderate	Negligible	

Removal in WWT/POTW (Overall):	90					
Condition	**Rating Values**	**Rating Description**				**Comment**
		1	**2**	**3**	**4**	
Biodegradation Destruction:		Unknown	Complete	Partial	—	
Aerobic Biodeg Ult:	4	<= Days	Weeks	Months	> Months	
Aerobic Biodeg Prim:		<= Days	Weeks	Months	> Months	
Anaerobic Biodeg Ult:	4	<= Days	Weeks	Months	> Months	
Anaerobic Biodeg Prim:		<= Days	Weeks	Months	> Months	
Hydrolysis (t1/2 at pH 7,25C) A:		<= Minutes	Hours	Days	>= Months	
Hydrolysis (t1/2 at pH 7,25C) B:		<= Minutes	Hours	Days	>= Months	
Sorption to Soils/Sediments:	1	V. Strong	Strong	Moderate	Low	
Migration to Ground Water:	1	Negligible	Slow	Moderate	Rapid	
Photolysis A, Direct:		Negligible	Slow	Moderate	Rapid	
Photolysis B, Indirect:		Negligible	Slow	Moderate	Rapid	
Atmospheric Ox A, OH:		Negligible	Slow	Moderate	Rapid	
Atmospheric Ox B, O3:		Negligible	Slow	Moderate	Rapid	
Bio Comments:						
Fate Comments:						

Ecotoxicity Values

Test organism	Test Type	Test Endpoint	Predicted	Experimental	Comments
Fish	96-h	LC50	>100		
Daphnid	48-h	LC50	>100		
Green Algae	96-h	EC50	>100		
Fish	-		>10		

Test organism	Test Type	Test Endpoint	Predicted	Experimental	Comments
		Chronic Value			
Daphnid	-	Chronic Value	>10		
Green Algae	-	Chronic Value	>10		

Ecotox Value Comments: Predictions are based on SARs for anionic polymers; [redacted] solid (est.) with an unknown MP (P); S = dispersible (P); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO3; and TOC <2.0 mg/L.

Ecotox Factors

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute Aquatic (ppb):	100,000	5	20,000	
Chronic Aquatic (ppb):	10,000	10	1,000	

Factors	Values	Comments
SARs:	Anionic Polymers	
SAR Class:	[redacted]	
TSCA NCC Category?	Polyanionic Polymers (Momomers)	

Recommended Testing:

Ecotox Factors Comments: Environmental

Hazard: Environmental hazard is relevant to whether a new chemical substance is likely to present unreasonable risks because the significance of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance.EPA estimated environmental hazard of this new chemical substance using hazard data on analogous chemicals. Based on these estimated hazard values, EPA concludes that this chemical substance has a low environmental hazard.

·Substance falls within the TSCA New Chemicals Categories

of Polycationic polymers (&monomers)
· SAR chemical class of
[redacted]
· Low hazard for the PMN
and low molecular weight oligomers with an acute and chronic CoC of 20,000
ppb and 1,000 ppb, respectively

Comments/Telephone Log

Artifact	Update/Upload Time